SEQUENCE LISTING

<110> Robert G. Korneluk et al.

<120> METHODS AND COMPOUNDS FOR MODULATING
MALE FERTILITY

<130> 07891/018002

<140> 09/239,867
<141> 1999-01-29

<150> 60/073,001
<151> 1998-01-29

<160> 10

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 1559
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1559)
<223> n = A,T,C or G

<400> 1
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aaaacgtatg tgtctgcaga ncatcaatnag gatgaagaat tagtanaaga gattaataga 120
tcaaaaacgt ttgctggctt tgcaggtggt gggcctgcct gggcatcggc gcgttggagg 180
agacgccctg gggggcctta gctgccctga agcggtagac aggtggcaac gtgggggctc 240
aggagttgac aaacacaaga aagcagcgcc gaattgcagg tttatccgca gcttttattt 300
tgaagacagt gccacgaaac ctgcaaatcc tggtgtccca aatagtcaat accaagttga 360
aaaccatctg ggagaggaaa agcgttgtgc tttagacagg ccgtatgaga ctcgtgcaga 420
ccggcttttg agagctggac aggtggtgga tagatcagac tccatacacc cgaggagccc 480
cgccatgcat agtgaagaag ctagataaca gtcgtttcac aactggccag cctctgccca 540
cttgaccccg agagagctgg ccagtgctgg gctgtactac acaggcactg atgaccaagt 600
gcagtgcttc tgttgtggcg gaaaactgaa aaactgggaa cctggtgatc gtgcctggtc 660
agaacacagg agacattttc ctaattgctt ctttattttg ggccacaacg ttaatattcg 720
aggtgaatct gatgttgcga gttctgatag gaatttctca aattcaacaa gttctccaag 780
gaatccatcc atgacgggtt atgaagcccg gctcattact tttgggacat ggatgtactc 840
cgtcaacaaa gagcagcttg caagagctgg attttatgct ataggtcaag aggataaagt 900
acagtgcttt cactgtggag gagggctagc caactggaag cccaaggaag atccttggga 960
acagcatgct aaatggtatc caggttgcaa atatctgcta gaagagaagg gacatgaata 1020
tataaacaac attcatttaa cccgttcact tgagggagct ctggtacaaa ctaccaagaa 1080
aacaccatca ctaactaaaa gaatcagtga taccatcttc cctaatccta tgctacaaga 1140
agctatacga atgggatttg atttcaagga cgttaagaaa ataatggagg aaagaattca 1200

aacatctggg agcaactata aaacgcttga ggttcttgtt gcagatctag tgagcgctca 1260
gaaagacact acagaaaatg aattgaatca gacttcattg cagagagaaa tcagccctga 1320
agagccgcta aggcgtctgc aagaggagaa gctttgtaaa atctgcatgg acagatatat 1380
cgctgttgtt tttattcctt gtggacatct ggtcacttgt aaacaatgtg ctgaagcagt 1440
tgacagatgt cccatgtgca gcgcggttat tgatttcaag caaagagttt ttatgtctta 1500
atgtaactct acagtgggtg tgctatgttc ttattaccct gattaaatgt gtgatgtga 1559

<210> 2
<211> 236
<212> PRT
<213> Homo sapiens

<400> 2

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Ser	Val	Asn	Lys	Glu	Gln	Leu	Ala	Arg	Ala	Gly	Phe	Tyr	Ala	Ile	Gly
			20					25					30		
Gln	Glu	Asp	Lys	Val	Gln	Cys	Phe	His	Cys	Gly	Gly	Gly	Leu	Ala	Asn
		35					40					45			
Trp	Lys	Pro	Lys	Glu	Asp	Pro	Trp	Glu	Gln	His	Ala	Lys	Trp	Tyr	Pro
	50					55					60				
Gly	Cys	Lys	Tyr	Leu	Leu	Glu	Glu	Lys	Gly	His	Glu	Tyr	Ile	Asn	Asn
65					70					75					80
Ile	His	Leu	Thr	Arg	Ser	Leu	Glu	Gly	Ala	Leu	Val	Gln	Thr	Thr	Lys
				85					90					95	
Lys	Thr	Pro	Ser	Leu	Thr	Lys	Arg	Ile	Ser	Asp	Thr	Ile	Phe	Pro	Asn
			100					105					110		
Pro	Met	Leu	Gln	Glu	Ala	Ile	Arg	Met	Gly	Phe	Asp	Phe	Lys	Asp	Val
		115					120					125			
Lys	Lys	Ile	Met	Glu	Glu	Arg	Ile	Gln	Thr	Ser	Gly	Ser	Asn	Tyr	Lys
	130					135					140				
Thr	Leu	Glu	Val	Leu	Val	Ala	Asp	Leu	Val	Ser	Ala	Gln	Lys	Asp	Thr
145					150					155					160
Thr	Glu	Asn	Glu	Leu	Asn	Gln	Thr	Ser	Leu	Gln	Arg	Glu	Ile	Ser	Pro
				165					170					175	
Glu	Glu	Pro	Leu	Arg	Arg	Leu	Gln	Glu	Glu	Lys	Leu	Cys	Lys	Ile	Cys
			180					185					190		
Met	Asp	Arg	Tyr	Ile	Ala	Val	Val	Phe	Ile	Pro	Cys	Gly	His	Leu	Val
		195					200					205			
Thr	Cys	Lys	Gln	Cys	Ala	Glu	Ala	Val	Asp	Arg	Cys	Pro	Met	Cys	Ser
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Ala	Val	Ile	Asp	Phe	Lys	Gln	Arg	Val	Phe	Met	Ser				
225					230					235					

<210> 3
<211> 1588
<212> DNA
<213> Homo sapiens

<400> 3
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aaaacttgtg tacctgcaga catcaataag gaagaagaat ttgtagaaga gtttaataga 120
ttaaaaactt ttgctaattt tccaagtggt agtcctgttt cagcatcaac actggcacga 180
gcagggtttc tttatactgg tgaaggagat accgtgcggt gctttagttg tcatgcagct 240
gtagatagat ggcaatatgg agactcagca gttggaagac acaggaaagt atccccaaat 300
tgcagattta tcaacggctt ttatcttgaa aatagtgcca cgcagtctac aaattctggt 360
atccagaatg gtcagtacaa agttgaaaac tatctgggaa gcagagatca ttttgcctta 420
gacaggccat ctgagacaca tgcagactat cttttgagaa ctgggcaggt tgtagatata 480
tcagacacca tatacccgag gaaccctgcc atgtatagtg aagaagctag attaaagtcc 540
tttcagaact ggccagacta tgctcaccta accccaagag agttagcaag tgctggactc 600
tactacacag gtattggtga ccaagtgcag tgcttttgtt gtggtggaaa actgaaaaat 660
tgggaacctt gtgatcgtgc ctggtcagaa cacaggcgac actttcctaa ttgcttcttt 720
gttttgggcc ggaatcttaa tattcgaagt gaatctgatg ctgtgagttc tgataggaat 780
ttcccaaatt caacaaatct tccaagaaat ccatccatgg cagattatga agcacggatc 840
tttacttttg ggacatggat atactcagtt aacaaggagc agcttgcaag agctggattt 900
tatgctttag gtgaaggtga taaagtaaag tgctttcact gtggaggagg gctaactgat 960
tggaagccca gtgaagaccc ttgggaacaa catgctaaat ggtatccagg gtgcaaatat 1020
ctgttagaac agaagggaca agaatatata aacaatattc atttaactca ttcacttgag 1080
gagtgtctgg taagaactac tgagaaaaca ccatcactaa ctagaagaat tgatgatacc 1140
atcttccaaa atcctatggt acaagaagct atacgaatgg ggttcagttt caaggacatt 1200
aagaaaataa tggaggaaaa aattcagata tctgggagca actataaatc acttgaggtt 1260
ctggttgcag atctagtgaa tgctcagaaa gacagtatgc aagatgagtc aagtcagact 1320
tcattacaga aagagattag tactgaagag cagctaaggc gcctgcaaga ggagaagctt 1380
tgcaaaatct gtatggatag aaatattgct atcgtttttg ttccttgtgg acatctagtc 1440
acttgtaaac aatgtgctga agcagttgac aagtgtccca tgtgctacac agtcattact 1500
ttcaagcaaa aaatttttat gtcttaatct aactctatag taggcatgtt atgttgttct 1560
tattaccctg attgaatgtg tgatgtga 1588

<210> 4
<211> 236
<212> PRT
<213> Homo sapiens

<400> 4
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20 25 30
Glu Gly Asp Lys Val Lys Cys Phe His Cys Gly Gly Gly Leu Thr Asp
35 40 45
Trp Lys Pro Ser Glu Asp Pro Trp Glu Gln His Ala Lys Trp Tyr Pro
50 55 60
Gly Cys Lys Tyr Leu Leu Glu Gln Lys Gly Gln Glu Tyr Ile Asn Asn
65 70 75 80
Ile His Leu Thr His Ser Leu Glu Glu Cys Leu Val Arg Thr Thr Glu
85 90 95
Lys Thr Pro Ser Leu Thr Arg Arg Ile Asp Asp Thr Ile Phe Gln Asn
100 105 110
Pro Met Val Gln Glu Ala Ile Arg Met Gly Phe Ser Phe Lys Asp Ile
115 120 125
Lys Lys Ile Met Glu Glu Lys Ile Gln Ile Ser Gly Ser Asn Tyr Lys
130 135 140

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Ser Leu Glu Val Leu Val Ala Asp Leu Val Asn Ala Gln Lys Asp Ser
145                 150                 155                 160
Met Gln Asp Glu Ser Ser Gln Thr Ser Leu Gln Lys Glu Ile Ser Thr
                165                 170                 175
Glu Glu Gln Leu Arg Arg Leu Gln Glu Glu Lys Leu Cys Lys Ile Cys
            180                 185                 190
Met Asp Arg Asn Ile Ala Ile Val Phe Val Pro Cys Gly His Leu Val
        195                 200                 205
Thr Cys Lys Gln Cys Ala Glu Ala Val Asp Lys Cys Pro Met Cys Tyr
    210                 215                 220
Thr Val Ile Thr Phe Lys Gln Lys Ile Phe Met Ser
225                 230                 235
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<210> 5
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

<400> 5
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caaagtgaaa caagcacaaa aaagaacgag acacgggcgt ggggcacgag gtgctcactg 180
ngcaagcgcc cactccaccg cgtggtttcc agctggaggc tgggagcgtt ngtggcttcc 240
tcttttcttg ctgacccttc ggagctctgg gaagtggctg caccttggcg gctccccaga 300
gcgcgcggtg ctaatcgtgg gtcgtcagcc tgggtggctg ggcccggctt agggcagggt 360
ttggcatttc caatggtagg gggctcggac cgtccctccg cgggaccctc ccgttgggac 420
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atattcaaga gaagataact 500

<210> 6
<211> 67
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Cydia pomonella and Orgyia pseudotsugata

<221> VARIANT
<222> (1)...(67)
<223> Xaa = Any Amino Acid

<221> VARIANT
<222> (1)...(67)
<223> Xaa = Any Amino Acid

<400> 6

Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30
Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa Xaa Cys
50 55 60
Xaa Xaa Xaa
65

<210> 7
<211> 68
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Cydia pomonella and Orgyia pseudotsugata

<221> VARIANT
<222> (1)...(68)
<223> Xaa = Any Amino Acid

<221> VARIANT
<222> (1)...(68)
<223> Xaa = Any Amino Acid

<400> 7
Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30
Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60
Cys Xaa Xaa Xaa
65

<210> 8
<211> 69
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Cydia pomonella and Orgyia pseudotsugata

<221> VARIANT
<222> (1)...(69)
<223> Xaa = Any Amino Acid

<221> VARIANT
<222> (1)...(69)
<223> Xaa = Any Amino Acid

<400> 8
Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1   5   10   15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa
            20   25   30
Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
        35   40   45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
    50   55   60
Xaa Cys Xaa Xaa Xaa
65

<210> 9
<211> 70
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Cydia pomonella and Orgyia pseudotsugata

<221> VARIANT
<222> (1)...(70)
<223> Xaa = Any Amino Acid

<221> VARIANT
<222> (1)...(70)
<223> Xaa = Any Amino Acid

<400> 9
Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1   5   10   15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa
            20   25   30
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa
        35   40   45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa
    50   55   60
Xaa Xaa Cys Xaa Xaa Xaa
65   70

<210> 10
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Cydia pomonella and Orgyia pseudotsugata

<221> VARIANT
<222> (1)...(35)
<223> Xaa = Any Amino Acid

<221> VARIANT
<222> (1)...(35)
<223> Xaa = Any Amino Acid

<400> 10

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 1               5                  10                  15
Xaa His Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys
            20                  25                  30
Xaa Xaa Cys
        35
```